



| 7 | 6 | 5 | 4 | 3 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---------------|----------|------------|-----------------------|-----------------------|--------------------|---------------|-------------|-------------------------|---------------|-------------|--|--------------|--|----------------|--------------|--|---|-----------------|--------------|------------------|-------|-------|-------------------|-------|-------|-------------------|-------|-------|-------------------|-----|-------|------------------------|-------|-------|-------------------|----------|----------|--------------|------|--|-----------------------|--------------|--|-----------|-------------------------------------|--|-------------------|-------------------------------------|--|---------------|---------|--|---------------|--|--|----------------------------|-----------------|--|--------------------|----------|--|-----------------|---|--|--|--|-----------|--|--|--|------|-----|-------------|------|---|--|-------------------------------|-------------|--|--|--|-----|
| <div style="display: flex; justify-content: space-between;"> <div style="width: 25%;"> <p>NOTICE OF PROPRIETARY RIGHTS</p> <p>THIS DOCUMENT CONTAINS CONFIDENTIAL, TECHNICAL DATA INCLUDING TRADE SECRETS PROPRIETARY TO ANTCOM CORP. DISCLOSURE OF THIS DATA TO YOU IS EXPRESSLY CONDITIONED UPON YOUR ASSENT THAT ITS USE IS LIMITED TO USE WITHIN YOUR COMPANY ONLY AND THAT YOU WILL INDEMNIFY AND HOLD ANTCOM CORP. HARMLESS FROM ANY AND ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES, INCURRED BY ANTCOM CORP. AS A RESULT OF YOUR DISCLOSURE OF THIS DATA TO YOU OR TO ANY OTHER PERSON WITHOUT THE WRITTEN CONSENT OF ANTCOM CORP.</p> </div> <div style="width: 70%;"> <h3 style="text-align: center;">SPECIFICATIONS</h3> <p>ELECTRICAL:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>FREQUENCY:</td> <td>L1: (1575.42 ±12) MHz</td> <td>L2: (1227.60 ±12) MHz</td> </tr> <tr> <td>RADIATION PATTERN:</td> <td colspan="2" style="text-align: center;">HEMISPHERICAL</td> </tr> <tr> <td>POLARIZATION:</td> <td colspan="2" style="text-align: center;">RHCP</td> </tr> <tr> <td>VSWR:</td> <td colspan="2" style="text-align: center;">< 1.5:1</td> </tr> <tr> <td>IMPEDANCE:</td> <td colspan="2" style="text-align: center;">50 ohms</td> </tr> <tr> <td>ANTENNA GAIN (dBi):</td> <td>Free Space</td> <td>3 In G.P.</td> </tr> <tr> <td>@ 90 ° (ZENITH):</td> <td>+ 3.7</td> <td>+ 4.7</td> </tr> <tr> <td>@ 10 ° Elevation:</td> <td>- 2.9</td> <td>- 1.8</td> </tr> <tr> <td>@ 20 ° Elevation:</td> <td>- 1.3</td> <td>- 0.3</td> </tr> <tr> <td>@ 30 ° Elevation:</td> <td>0.0</td> <td>+ 1.4</td> </tr> <tr> <td>@ 60 - 90 ° Elevation:</td> <td>> 3.0</td> <td>> 3.9</td> </tr> <tr> <td>BEAM WIDTH (3dB):</td> <td>108 Deg.</td> <td>114 Deg.</td> </tr> <tr> <td>AXIAL RATIO:</td> <td colspan="2" style="text-align: center;">2 dB</td> </tr> <tr> <td>LIGHTNING PROTECTION:</td> <td colspan="2" style="text-align: center;">DC GROUNDING</td> </tr> <tr> <td>LNA GAIN:</td> <td colspan="2" style="text-align: center;">33 dB (Option A), 20 dB (Option A2)</td> </tr> <tr> <td>LNA NOISE FIGURE:</td> <td colspan="2" style="text-align: center;">3.0 dB (Option A), 2 dB (Option A2)</td> </tr> <tr> <td>LNA P1dB Out:</td> <td colspan="2" style="text-align: center;">+13 dBm</td> </tr> <tr> <td>LNA DC POWER:</td> <td colspan="2" style="text-align: center;">2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA</td> </tr> <tr> <td>REJECTION @ (-50/+50) MHz:</td> <td colspan="2" style="text-align: center;">-41 dB / -59 dB</td> </tr> <tr> <td>@ (-100/+100) MHz:</td> <td colspan="2" style="text-align: center;">< -65 dB</td> </tr> <tr> <td>POWER HANDLING:</td> <td colspan="2" style="text-align: center;">1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-)</td> </tr> </table> </div> </div> | | | | | FREQUENCY: | L1: (1575.42 ±12) MHz | L2: (1227.60 ±12) MHz | RADIATION PATTERN: | HEMISPHERICAL | | POLARIZATION: | RHCP | | VSWR: | < 1.5:1 | | IMPEDANCE: | 50 ohms | | ANTENNA GAIN (dBi): | Free Space | 3 In G.P. | @ 90 ° (ZENITH): | + 3.7 | + 4.7 | @ 10 ° Elevation: | - 2.9 | - 1.8 | @ 20 ° Elevation: | - 1.3 | - 0.3 | @ 30 ° Elevation: | 0.0 | + 1.4 | @ 60 - 90 ° Elevation: | > 3.0 | > 3.9 | BEAM WIDTH (3dB): | 108 Deg. | 114 Deg. | AXIAL RATIO: | 2 dB | | LIGHTNING PROTECTION: | DC GROUNDING | | LNA GAIN: | 33 dB (Option A), 20 dB (Option A2) | | LNA NOISE FIGURE: | 3.0 dB (Option A), 2 dB (Option A2) | | LNA P1dB Out: | +13 dBm | | LNA DC POWER: | 2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA | | REJECTION @ (-50/+50) MHz: | -41 dB / -59 dB | | @ (-100/+100) MHz: | < -65 dB | | POWER HANDLING: | 1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-) | | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="4">REVISIONS</th> </tr> <tr> <th>ZONE</th> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td>D</td> <td></td> <td>Thickness, Top X/Y Correction</td> <td>April-30-16</td> </tr> <tr> <td></td> <td></td> <td></td> <td>S.H</td> </tr> </table> | | REVISIONS | | | | ZONE | REV | DESCRIPTION | DATE | D | | Thickness, Top X/Y Correction | April-30-16 | | | | S.H |
| FREQUENCY: | L1: (1575.42 ±12) MHz | L2: (1227.60 ±12) MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RADIATION PATTERN: | HEMISPHERICAL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POLARIZATION: | RHCP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VSWR: | < 1.5:1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IMPEDANCE: | 50 ohms | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ANTENNA GAIN (dBi): | Free Space | 3 In G.P. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| @ 90 ° (ZENITH): | + 3.7 | + 4.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| @ 10 ° Elevation: | - 2.9 | - 1.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| @ 20 ° Elevation: | - 1.3 | - 0.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| @ 30 ° Elevation: | 0.0 | + 1.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| @ 60 - 90 ° Elevation: | > 3.0 | > 3.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BEAM WIDTH (3dB): | 108 Deg. | 114 Deg. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AXIAL RATIO: | 2 dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LIGHTNING PROTECTION: | DC GROUNDING | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LNA GAIN: | 33 dB (Option A), 20 dB (Option A2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LNA NOISE FIGURE: | 3.0 dB (Option A), 2 dB (Option A2) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LNA P1dB Out: | +13 dBm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LNA DC POWER: | 2.5V/20mA, 3V/29mA, 3.3V/35mA, (2.5-24)V/<50mA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| REJECTION @ (-50/+50) MHz: | -41 dB / -59 dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| @ (-100/+100) MHz: | < -65 dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| POWER HANDLING: | 1 Watt CW, Optional: 10 Watts 1 microsec Pulse (-AL-) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| REVISIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZONE | REV | DESCRIPTION | DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | | Thickness, Top X/Y Correction | April-30-16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | S.H | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <div style="display: flex;"> <div style="width: 30%;"> </div> <div style="width: 30%;"> </div> <div style="width: 30%;"> <p>MECHANICAL:</p> <p>SIZE: LENGTH = 2.00 in.[50.80 mm], WIDTH = 2.00 in. [50.80 mm] HEIGHT= 0.533in. [13.54mm]</p> <p>WEIGHT: 2.6 oz. (74 g)</p> <p>FINISH: SKYDROL RESISTANT POLYURETHANE ENAMEL BASE IRIDIUM PER MIL-C-5441</p> <p>MATERIAL: 6061-T6 ALUMINUM ALLOY BASE COMPOSITE RADOME, IMPACT, ABRASION, UV, SOLVENT, SKYDROL RESISTANCE, AND FIRE RETARDANT</p> <p>CONNECTOR: 5 IN. CABLE SMC PLUG (OPTION: SMA, SSMA, SSMC, SMB, SSMB, ACRM, SMP, SSMP)</p> <p>ENVIRONMENTAL:</p> <p>TEMPERATURE: -67 °F TO +185 °F [-55 °C TO +85 °C] ALTITUDE: 70,000 ft. VIBRATION: > 30 G's LEAKAGE: HERMETICALLY SEAL</p> <p>FEDERAL & MILITARY SPECIFICATIONS:</p> <p>DESIGN TO: FAA TSO-C144, DO-160D, D0-228, MIL-C-5541, MIL-E-5400, MIL-I-45208A, MIL-STD-810, AND SAE J1455</p> <p>ACCEPTANCE TEST PROCEDURE: ATP-GPS-L1L2-100</p> </div> </div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>QUANTITY REQD</th> <th>DESCRIPTION</th> <th>PART NO</th> <th>SPECIFICATION</th> <th>MATERIAL</th> <th>FINISH</th> <th>REV</th> </tr> <tr> <td>5</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>ADHESIVE GASKET</td> <td>12345G-3M-1G</td> <td></td> <td></td> <td></td> <td>3</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2</td> </tr> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> </tr> <tr> <td>-2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table> | | | | | | QUANTITY REQD | DESCRIPTION | PART NO | SPECIFICATION | MATERIAL | FINISH | REV | 5 | | | | | | | 1 | ADHESIVE GASKET | 12345G-3M-1G | | | | 3 | 1 | | | | | | 2 | 1 | | | | | | 1 | -2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| QUANTITY REQD | DESCRIPTION | PART NO | SPECIFICATION | MATERIAL | FINISH | REV | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | ADHESIVE GASKET | 12345G-3M-1G | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p style="text-align: center; font-size: 1.2em;">P/N: 1.9G1215A-5SMC-2-OSR</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>SIZE:</td> <td>FREQ. BAND:</td> <td>LNA:</td> </tr> <tr> <td>1: 2" SQ.</td> <td>1215: L1/L2</td> <td>A2: WITH 33 dB Gain LNA</td> </tr> <tr> <td>1.8: 1.8" SQ.</td> <td>15: L1 ONLY</td> <td>A2: WITH 20dB Gain LNA WITHOUT REJECTION FILTERS</td> </tr> <tr> <td>2: 2.6" DIA.</td> <td></td> <td>P: WITHOUT LNA</td> </tr> <tr> <td>3: 3.5" DIA.</td> <td></td> <td>A4: WITH 40 dB Gain LNA WITHOUT REJECTION FILTERS</td> </tr> <tr> <td>4: MINI ARJIN</td> <td></td> <td></td> </tr> </table> <p>CABLE'S LENGTH: X: NO CABLE S: SMA/ SMC/ SMC; P: PINS -1: G: OSS WHITE #17925 PER FED-STD-595B M: MAG. N: NO MAG. M: VCC/ MIP; MINCX -2: LUSTERLESS GRAY #36320 PER FED-STD-595B #1: CABLE LENGTH (IN) N: N.B. N.B.; R: Rhead -3: CAMO GREEN #34094 PER FED-STD-595B MACHINED SURFACES R: RIGHT ANGLE CON. T: TB; TNC; TNC-Bulkhead -4: LUSTERLESS BLACK #37038 PER FED-STD-595B DO NOT SCALE DRAWING</p> | | | | | | SIZE: | FREQ. BAND: | LNA: | 1: 2" SQ. | 1215: L1/L2 | A2: WITH 33 dB Gain LNA | 1.8: 1.8" SQ. | 15: L1 ONLY | A2: WITH 20dB Gain LNA WITHOUT REJECTION FILTERS | 2: 2.6" DIA. | | P: WITHOUT LNA | 3: 3.5" DIA. | | A4: WITH 40 dB Gain LNA WITHOUT REJECTION FILTERS | 4: MINI ARJIN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SIZE: | FREQ. BAND: | LNA: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1: 2" SQ. | 1215: L1/L2 | A2: WITH 33 dB Gain LNA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.8: 1.8" SQ. | 15: L1 ONLY | A2: WITH 20dB Gain LNA WITHOUT REJECTION FILTERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2: 2.6" DIA. | | P: WITHOUT LNA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3: 3.5" DIA. | | A4: WITH 40 dB Gain LNA WITHOUT REJECTION FILTERS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4: MINI ARJIN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>2. ADHESIVE GASKET IS SUPPLIED BY ANTCOM CORPORATION</p> <p>1. DIMENSIONS IN BRACKETS ARE IN MILLIMETERS [mm]</p> <p>NOTES: UNLESS OTHERWISE SPECIFIED:</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 6 | 5 | 4 | 3 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

NMO Connector Option is Now Available for Some Antennas